DIVE NUMBER: JSLI-4365

STUDY AREA: Cape Lookout Lophelia B

STATION OVERVIEW

Project Islands in the Stream 2001

Principal investigators SW Ross¹

KJ Sulak, E Baird

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Wilmington NC 28409

Purpose Continued trophodynamic studies off North

> Carolina; mapping of deep coral banks and ecological studies of macroinvertebrates and

fishes; educational outreach

R/V Seward Johnson, Johnson Sea Link I Vessel

Submersible

Science Divers KJ Sulak (bow), J Caruso (stern)

External Video Tapes 3 mini DVs 1 mini DV **Internal Video Tapes**

Digital Still Photos 0

dGPS **Positioning System**

CTD File ~ ✓

Specimens Collected

Other Hard copies of bow and stern audio logs

NOAA-OE, USGS, UNCW, NC Coastal Reserve, Acknowledgements

NC Museum of Natural Sciences

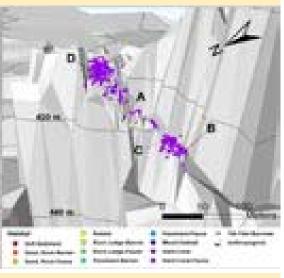
SEADESC Analyst AM Necaise, AM Quattrini, ML Partyka

11/16/2006 **Date Compiled**

GENERAL LOCATION



Dive Track:



DIVE DATA

Bottom Current (Kts)

Date	24-Sep-01
Minimum Bottom Depth (m)	410
Maximum Bottom Depth (m)	428
Start Bottom Time (EDT)	8:42
End Bottom End (EDT)	11:15
Starting Latitude (N)	34° 11.344'
Starting Longitude (W)	75° 53.795'
Ending Latitude (N)	34° 11.406'
Ending Longitude (W)	75° 53.743'
Surface Current (Kts)	

Image A: Hard Coral 34° 11.394' N, 75° 53.778' W



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IMAGE GALLERY

* indicates image position is approximated

Image B: Hard Coral 34° 11.334' N, 75° 53.796' W Image C: Hard Coral 34° 11.352' N, 75° 53.802' W Image D: Hard Coral 34° 11.412' N, 75° 53.754' W







RELEVANT WORK AND/OR LITERATURE CITED

R/V Cape Hatteras cruises Aug 2001 & Sep 2006 (S.W. Ross, unpubl. data) EEZ-SCAN 87 Scientific Staff (1991) Reed and Ross (2005) Ross and Nizinski (in press)

BIOLOGICAL ENVIRONMENT

A number of fishes were seen during this dive, though they were predominantly represented by three species, *Laemonema barbatulum, L. melanurum* and *Hoplostethus occidentalis*. The two species of *Laemonema* were common throughout the dive while *H. occidentalis* occurred more frequently in the high-relief *Lophelia* thicket areas of the dive. Other fishes seen included *Myxine glutinosa, Dysommina rugosa, Squalus cubensis, Cirrhigaleus asper* and notably *Carcharhinus altimus*. Mobile invertebrates common to this area included vast numbers of brittle stars, several spiny and pencil urchins, and a few spider crabs. The only sessile invertebrates observed were basket stars attached to some of the larger coral thickets and a number of small, ball-like sponges.

PHYSICAL ENVIRONMENT

This dive took place exclusively over hard coral habitat without attached fauna. The physical structure of this reef area varied from low relief areas of dense dead coral matrices to high-relief thickets with over 40% living *Lophelia pertusa*. A number of these thickets were heavily cemented at the bases making them seem quite dense while others were more loosely organized with numerous large interstices. Sandy areas with mixed rubble were common between the coral patches.

ADDITIONAL COMMENTS

This dive was recorded on 3 mini DVs, with no time or CTD overlay, and is archived on 3 DVDs. A large amount of footage was shot in very close proximity to the reef during attempts at capturing fish. There is some good footage of *Carcharhinus altimus* swimming over the reef.